

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
2 December 2004 (02.12.2004)

PCT

(10) International Publication Number
WO 2004/103318 A1

(51) International Patent Classification⁷: **A61K 6/08**,
A61C 5/12

(21) International Application Number:
PCT/FI2004/000308

(22) International Filing Date: 21 May 2004 (21.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20030779 23 May 2003 (23.05.2003) FI

(71) Applicant (for all designated States except US): **STICK
TECH OY** [FI/FI]; P.O. Box 114, FI-20521 Turku (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **VALLITTU**,
Pekka [FI/FI]; Kylläisentie 23, FI-21620 Kuusisto (FI).
LASSILA, Lippo [FI/FI]; Brattnäsvägen 183, FI-21630
Lielax (FI). **YLI-URPO, Antti** [FI/FI]; Värttinäkatu 17,
FI-20660 Littoinen (FI). **TEZVERGIL, Arzu** [TR/FI];
Stålarinkatu 5 E 52, FI-20810 Turku (FI).

(74) Agent: **TURUN PATENTTITOIMISTO OY**; P.O. Box
99, FI-20521 Turku (FI).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to the applicant's entitlement to claim the priority of the
earlier application (Rule 4.17(iii)) for all designations

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: A MATRIX BAND

(57) Abstract: The invention relates to a matrix band that is characterized in that it comprises fibers and a matrix, at least a portion of said matrix being at least partially uncured. The invention further relates to a dental restoration kit, a prepreg and the use of said matrix.

WO 2004/103318 A1

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K6/08 A61C5/12

According to International Patent Classification (IPC) or to both national classification and IPC.

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K A61C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/068598 A1 (KANGASNIEMI ILKKA ET AL) 10 April 2003 (2003-04-10)	11
Y	paragraphs '0030! - '0032!, '0034! claim 17 claims	1-10, 12-15
Y	----- EP 0 296 539 A (UNIV TEXAS) 28 December 1988 (1988-12-28) column 1, line 37 - column 2, line 11 claims	1-10, 12-15
A	----- US 6 186 790 B1 (SCHULMAN MARTIN L ET AL) 13 February 2001 (2001-02-13) column 4, line 11 - line 38 claims ----- -/--	1-15

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

27 August 2004

Date of mailing of the international search report

08/09/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Thornton, S

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 459 361 A (DIN FRANKLIN M) 4 December 1991 (1991-12-04) column 3, line 27 - column 4, line 20 column 5, line 13 - line 25 claims -----	1-15
A	US 6 197 410 B1 (KANGASNIEMI ILKKA ET AL) 6 March 2001 (2001-03-06) cited in the application examples 1,3 claims -----	1-15
A	WO 02/100355 A (LASSILA LIPPO ; STICK TECH OY (FI); VALLITTU PEKKA (FI); YLI-URPO ANTT) 19 December 2002 (2002-12-19) page 6, line 26 - page 7, line 35 claims -----	1-15

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No.

PCT/FI2004/000308

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2003068598	A1	10-04-2003	WO 03030837 A1	17-04-2003
			US 2004106085 A1	03-06-2004
EP 0296539	A	28-12-1988	US 4778385 A	18-10-1988
			EP 0296539 A2	28-12-1988
			JP 1086963 A	31-03-1989
US 6186790	B1	13-02-2001	US 2002086266 A1	04-07-2002
			US 2001036617 A1	01-11-2001
EP 0459361	A	04-12-1991	US 5035615 A	30-07-1991
			AU 640588 B2	26-08-1993
			AU 7620391 A	05-12-1991
			CA 2042169 A1	01-12-1991
			EP 0459361 A1	04-12-1991
			JP 4231040 A	19-08-1992
			ZA 9103709 A	26-02-1992
US 6197410	B1	06-03-2001	FI 980528 A	10-09-1999
			AU 754714 B2	21-11-2002
			AU 2427599 A	27-09-1999
			BR 9908689 A	14-11-2000
			CA 2322891 A1	16-09-1999
			CN 1117555 B	13-08-2003
			EE 200000523 A	15-02-2002
			EP 1067895 A1	17-01-2001
			WO 9945890 A1	16-09-1999
			HU 0102583 A2	28-11-2001
			JP 2002506086 T	26-02-2002
			NO 20004475 A	08-11-2000
			NZ 507401 A	25-10-2002
			PL 342769 A1	02-07-2001
			RU 2207107 C2	27-06-2003
			SK 13302000 A3	12-02-2001
WO 02100355	A	19-12-2002	CA 2447834 A1	19-12-2002
			EP 1401378 A1	31-03-2004
			WO 02100355 A1	19-12-2002